Panasonic

Stereo Clock Radio

RC-X230

Operating Instructions

[P]

Before connecting, operating or adjusting this product, please read these instructions completely.

Thank you for purchasing this unit.

For optimum performance and safety, please read these instructions carefully.

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•The following mark and symbols are located on bottom of the unit.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS. NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

The model number and serial number of this product can be found on either the back or the bottom of the unit.
Please note them in the space provided below and retain them for future reference.

MODEL NUMBER **RC-X230**

SERIAL NUMBER _____

CAUTION:
TO PREVENT ELECTRIC SHOCK MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

Precautions

Before using this unit please read these operating instructions carefully. Take special care to follow the warnings indicated on the unit itself as well as the safety suggestions listed below.
Afterwards keep them handy for future reference.

Safety

1. **Power Source** -- The unit should be connected to power supply only of the type described in the operating instructions or as marked on the unit.
2. **Polarization** -- If the unit is equipped with a polarized AC power plug (a plug having one blade wider than the other), that plug will fit into the AC outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
3. **Power Cord Protection** -- AC power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Never take hold of the plug or cord if your hand is wet, and always grasp the plug body when connecting or disconnecting it.
4. **Nonuse Periods** -- When the unit is not used, turn the power off. When left unused for a long period of time, the unit should be unplugged from the household AC outlet.

Installation

Environment

1. **Water and Moisture** -- Do not use this unit near water—for example, near a bathtub, washbowl, swimming pool, or the like. Damp basements should also be avoided.
2. **Heat** -- The unit should be situated away from heat sources such as radiators and the like. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).

Placement

1. **Ventilation** -- The unit should be situated so that its location or position does not interfere with its proper ventilation. Allow 10 cm (4") clearance from the rear of the unit.
2. **Foreign Material** -- Care should be taken so that objects do not fall into and liquids are not spilled into the unit. Do not subject this unit to excessive smoke, dust, mechanical vibration, or shock.
3. **Magnetism** -- The unit should be situated away from equipment or devices that generate strong magnetism.
4. **Stacking** -- Do not place heavy objects on top of the unit.
5. **Surface** -- Place the unit on a flat, level surface.
6. **Carts and Stands** -- The unit should be used only with a cart or stand that is recommended by the manufacturer. The unit and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit and cart combination to overturn.

7. **Wall or Ceiling Mounting** -- The unit should not be mounted to a wall or ceiling, unless specified in this operating instructions.

Maintenance

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution.

Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

Service

1. **Damage Requiring Service** -- The unit should be serviced by qualified service personnel when:
   (a) The AC power supply cord or the plug has been damaged; or
   (b) Objects have fallen or liquid has been spilled into the unit; or
   (c) The unit has been exposed to rain; or
   (d) The unit does not appear to operate normally or exhibits a marked change in performance; or
   (e) The unit has been dropped, or the enclosure damaged.
2. **Servicing** -- The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Precautions (continued)

Keep the unit away from heating devices and electrical noise generating devices such as fluorescent lamps and motors.

The unit should be kept free from dust, moisture, and vibration, and should not be exposed to direct sunlight.

Do not clean the plastic cabinet with benzine or thinner. Clean it with a solution of soap and water.

Avoid spray-type insecticides. Some insecticides contain chemicals that could cause cabinet deformation.

Do not connect the unit to an AC outlet other than one supplying the specified voltage.

Avoid cuts, scratches, or poor connections in the AC power cord which may result in fire or electric shock hazard. Also excessive bending, pulling, or splicing of the cord should be avoided.

Do not unplug the AC power cord by pulling on the cord. To do so may cause premature failure or shock hazard.

If the unit is not going to be used for a long period of time, remove the back up battery to prevent possible damage due to battery leakage.

Time-Protecting Battery Back-Up

The back-up battery will keep the clock operating during a power interruption. When power is resumed, the display will show the current time.

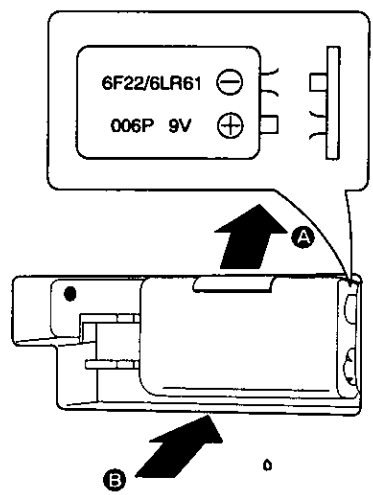
The alarm time is not affected by a power interruption—so there is no need to reset the alarm.

Battery installation

1 **Connect a 9-Volt battery (not included) to the snaps, observing correct polarity.**
A battery installed with incorrect polarity may leak and damage the unit.

2 **Place the battery in the compartment by inserting it in the direction of the arrow Ⓑ, while pushing the battery holder in the direction of the arrow Ⓐ.**
Note no battery cover is used.

Bottom of the unit



Battery replacement

Unplug the AC power cord from the AC power outlet. After several seconds, plug it back into the outlet. If the digits flash continuously, replace the battery with a new one.

Replace the battery with a new one after one year of use (most batteries have a shelf life of approximately one year).

If an extended power failure or interruption occurs, replace the battery with a new one.

Time-Protecting Battery Back-Up (continued)

Operation

The time battery back-up is designed to keep the clock operating in the event of a power failure or interruption. (Such as when moving this unit to a different room.) Whenever a power interruption occurs, the clock display will disappear. However, even though the display is completely blacked out, the 9-volt back-up battery will take over as the power source, preserving present time and the alarm time.

Even if the power is not resumed by the wake-up time, the buzzer alarm will activate.

Notes

When the set is unplugged (not in use) for a long time, remove the back-up battery to prevent possible battery leakage.

Power failures may occur at any time of the night or day and can be of a long or short duration.
Most failures are so short that people don't even notice the interruption. These interruptions do, however, affect clocks which do not incorporate a battery back-up.

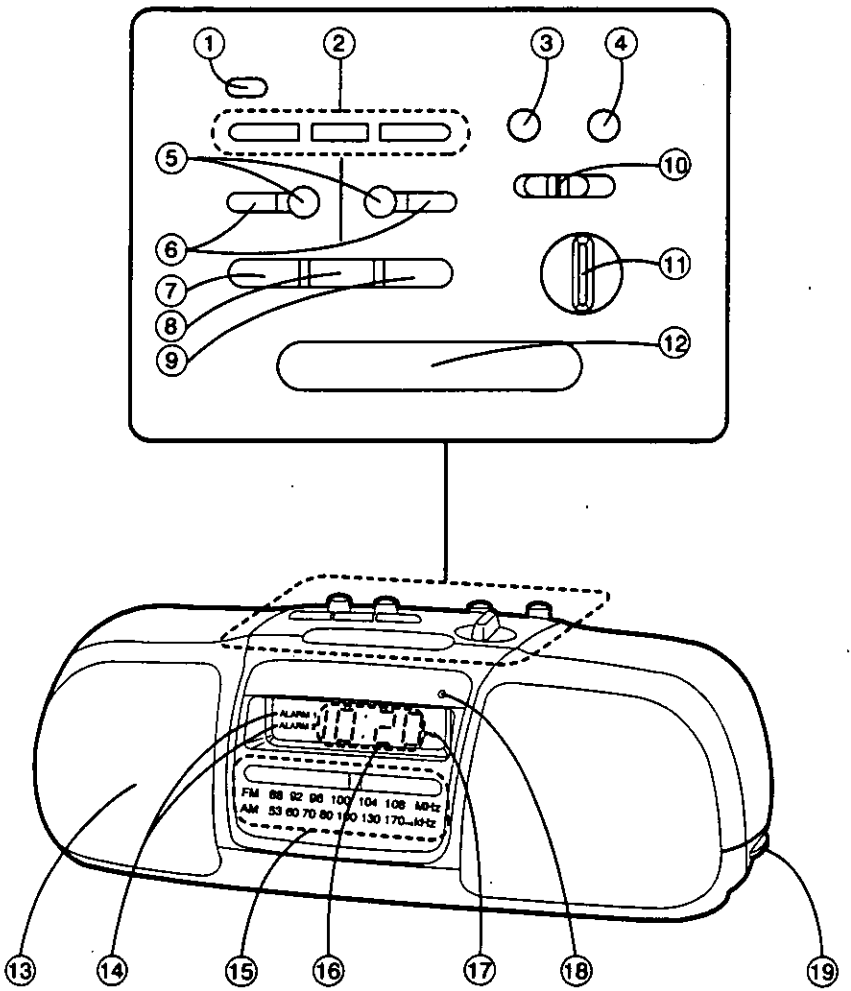
If the power is not resumed by the wake-up time, the radio alarm will not activate.

If the back-up battery goes dead during a power interruption, the present time and alarm time must also be reset after the interruption.

The back-up battery will be exhausted after about 23 hours of total (accumulative) use. (The battery life will vary depending on the frequency of the power interruption.)

After a power interruption, the time shown in the display window may not be always correct (it may gain or lose approximately 6 minutes per hour).

Location and Function of Controls



Location and Function of Controls (continued)

Top and front panel section

① **Brightness selector (BRIGHTNESS)**

② **Time set buttons (TIME SET)**
The FWD button forwards the displayed time and the REV button reverses it. To forward or reverse the displayed time rapidly, press and hold the FAST button with the FWD or REV button.

③ **Surround button (SURROUND)**
Press to enjoy the stereo sound as if you were in a concert hall.

④ **Tone button (TONE)**

⑤ **Alarm 1 (radio) and 2 (buzzer) select buttons**
Press the alarm 1 or 2 select button, the corresponding indicator will light up.

⑥ **Alarm 1 and 2 display/adjust buttons (DISP/ADJ)**
Set the desired time using the time set buttons while pressing this button. If the alarm 1 and 2 display/adjust buttons are pressed at the same time, the clock display shows the alarm 1 time.

⑦ **Sleep button (SLEEP)**
Press this button when you wish to fall asleep while listening to radio.

⑧ **Off/time set button (OFF TIME SET)**
Press this button to shut off the radio, alarm, doze, and sleep functions.
Press and hold to set the correct time.

⑨ **Radio button (RADIO)**
Press this button to listen to the radio.

⑩ **Band selector (BAND)**

⑪ **Volume control (VOLUME)**

⑫ **Doze button (DOZE)**
When the alarm sounds, if you do not wish to wake up immediately, press this button. The alarm will shut off for 7 minutes, and then the alarm will operate again.

⑬ **Speakers**

⑭ **Alarm 1 and 2 indicators**

⑮ **Radio dial display**

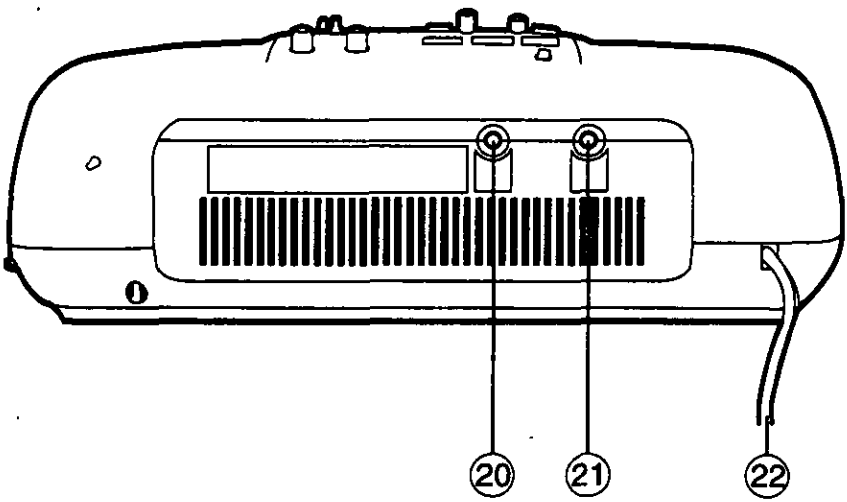
⑯ **Clock display**

⑰ **PM indicator**

⑱ **FM stereo indicator (FM ST)**

⑲ **Tuning control (TUNING)**

Rear panel section

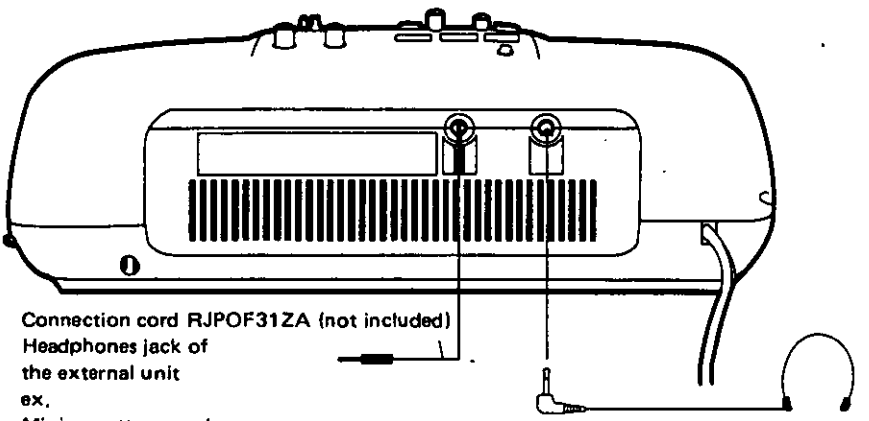


⑳ **Audio input jack (AUDIO IN)**

㉑ **Headphones jack (∩)**

㉒ **AC power cord**

Connections



How to use the headphones

Connect the plug from the headphones (not included) to the headphones jack.

Speakers are automatically shut off when the headphones connected.

Never fall asleep while using the headphones.

Avoid listening for prolonged periods of time to prevent hearing damage.

When the headphones are in use, the buzzer alarm and radio alarm will still function, but only the buzzer alarm will be heard from the speaker.

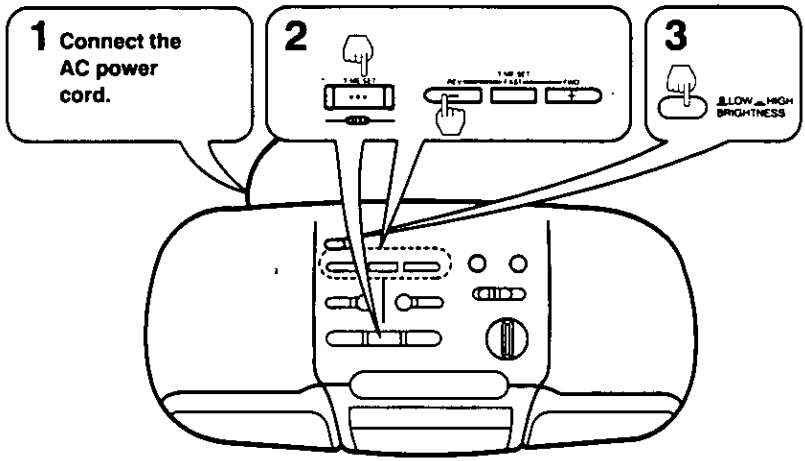
How to use the unit as an amplifier

1. **Connect the output of the external unit to the audio input jack.**

2. **Press the radio button.**
   When the connection cord is connected to the audio input jack, the sound of the external unit is given priority.

Setting the Correct Time

To set the correct time on the clock display, use the following procedure.



1 Connect the AC power cord to your household AC power outlet.

The clock display will begin to flash continuously.

2 While pressing the radio off/time set button, press and hold the time set buttons until the correct time appears on the clock display.

The digits should stop flashing.

To forward or reverse the displayed time rapidly, press and hold the FAST button with the FWD or REV button.

To forward or reverse the displayed time minute by minute, press the FWD or REV button repeatedly.

The seconds are automatically set to "0" when the FWD or REV button is pressed.

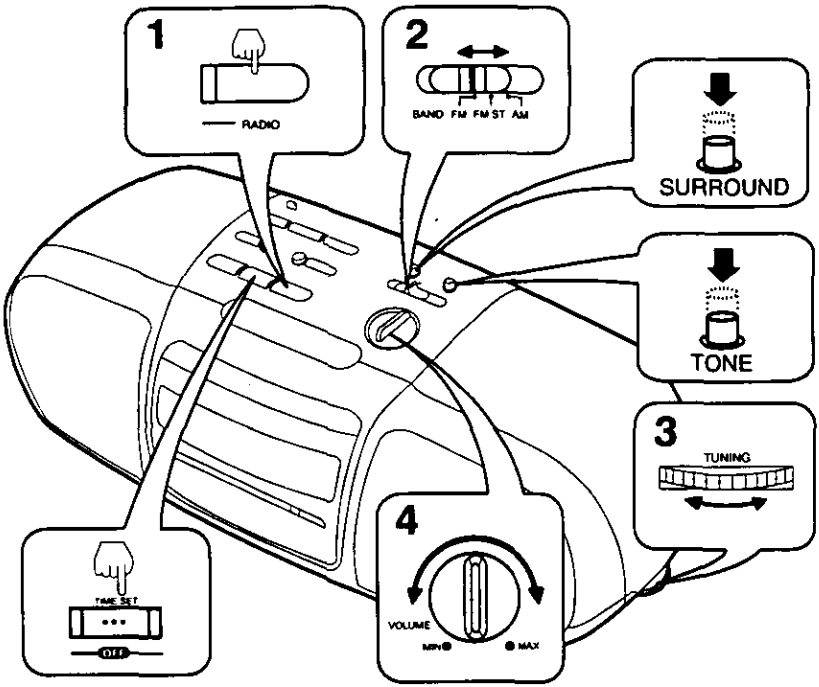
Observe the PM indicator. A green dot (PM indicator) indicates "PM" and no dot indicates "AM".

3 Set the brightness selector to "HIGH" or "LOW".

To increase the brightness of the time display, set this selector to HIGH"; to decrease it, set to "LOW".

The correct time can usually be obtained by listening for time checks on the radio, or from telephone time services.

Listening to Radio Broadcasts



1 **Press the radio button.**

2 **Set the band selector to "FM", "FM ST", "AM".**

To receive FM stereo broadcasts, set the band selector to "FM ST". The FM stereo indicator will light when receiving FM stereo broadcasts.

If FM stereo reception is poor (excessive noise, the FM stereo indicator flickers), set the band selector to "FM". This will reduce the noise and provide clear reception; however, the broadcast will not be heard in stereo.

3 **Tune in the desired station with the tuning control.**

4 **Adjust the volume control to the desired level.**

To turn off the radio, press the off/time set button.

Tone button

HIGH: Emphasize the high-pitch tone
LOW: Suppress the high-pitch tone

Surround button

When this button is set to "ON", the surround system enhances the sound from a normal stereo sound source. Surround mode increases the stereo imaging, thereby broadening the listening area of the stereo sound.

Antennas

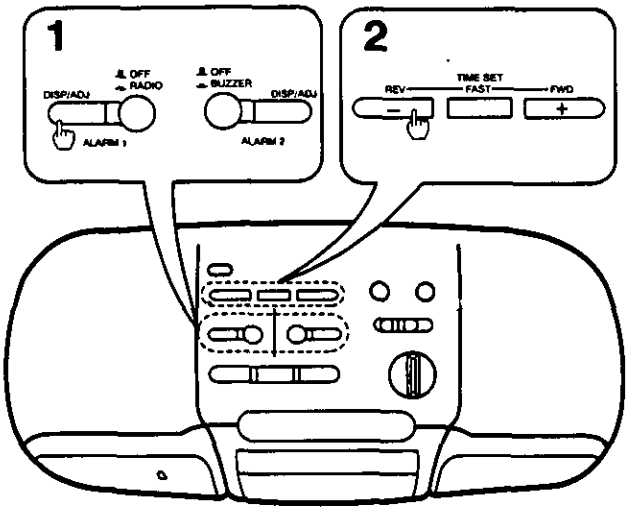
FM: The AC power cord functions as an FM antenna. To obtain the best FM reception, extend and change the direction of the AC power cord.

AM: A sensitive ferrite core antenna is built in this unit to assure excellent AM reception in most areas.
To improve the reception of weak stations, turn the unit in the direction which gives the best results.

Operation of Dual Wake-Up System

This set incorporates a dual wake-up system. Each alarm wake-up time can be set as shown below.

Alarm time setting



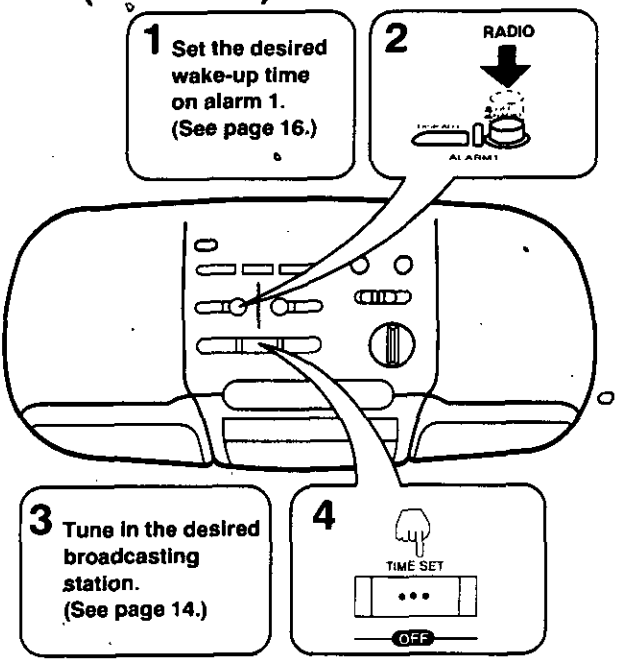
1 **Press and hold the alarm 1 (or 2) display/adjust button.**
The clock display shows "12:00".

2 **While pressing the alarm 1 (or 2) display/adjust button, press and hold the time set buttons until desired wake-up time appears on the clock display.**
Make sure the AM or PM setting is correct.

When desired wake-up time appears on the display, release the alarm 1 (or 2) display/adjust button. The present time is restored on the clock display.

To make sure of the preset time, press the alarm 1 (or 2) display/adjust button.

Radio alarm (ALARM 1)



1 **Set the desired wake-up time on alarm 1.**
(See page 16.)

2 **Press the alarm 1 select button.**
The alarm 1 indicator will light up.

3 **Tune in the desired broadcasting station.**
(See page 14.)

4 **Press the off/time set button to turn off the radio.**

At the specified wake-up time, the radio alarm will activate.
The alarm will shut off automatically after about 59 minutes.

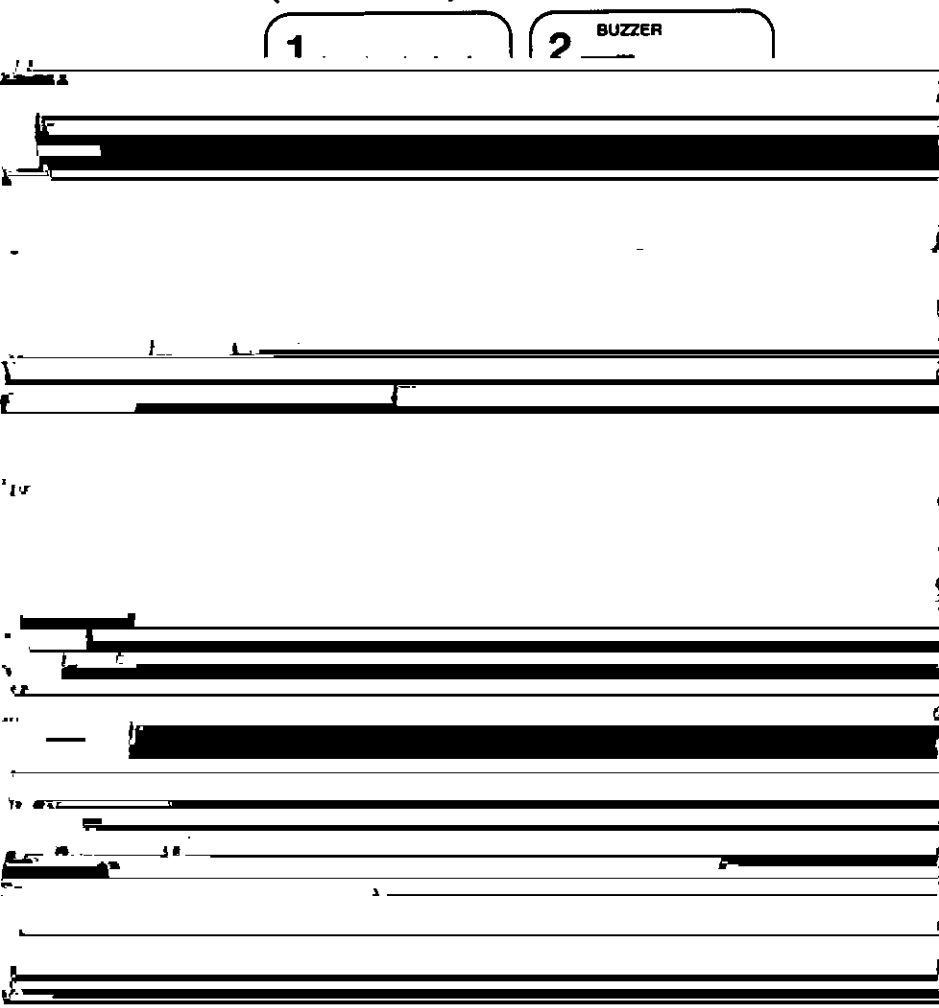
To shut off the alarm before automatic shut-off, press the off/time set button.

To release the alarm function, press the alarm 1 select button.

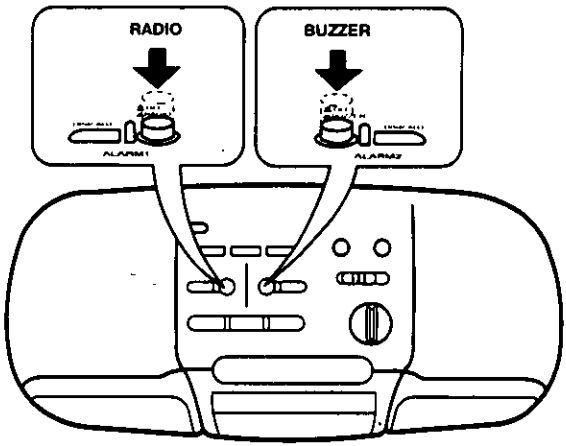
Do not connect the headphones when the radio alarm is set.

Operation of Dual Wake-up System
(continued)

Buzzer alarm (ALARM 2)

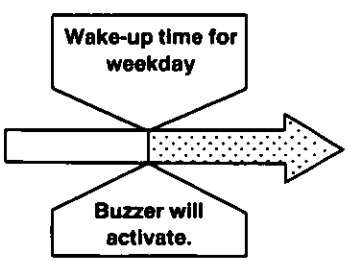


Combination of alarms



The buzzer alarm and the radio alarm can be set at the same time. Both alarms will activate simultaneously.

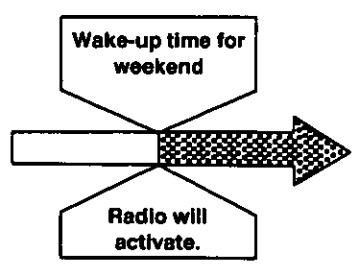
Example
Set the wake up time for weekdays on alarm 2, and for weekends on alarm 1.



ALARM 1...OFF
ALARM 2...BUZZER

The alarm will activate automatically at the same time every day.
Make sure to set the alarm select button to "OFF" when you want to cancel the alarm.

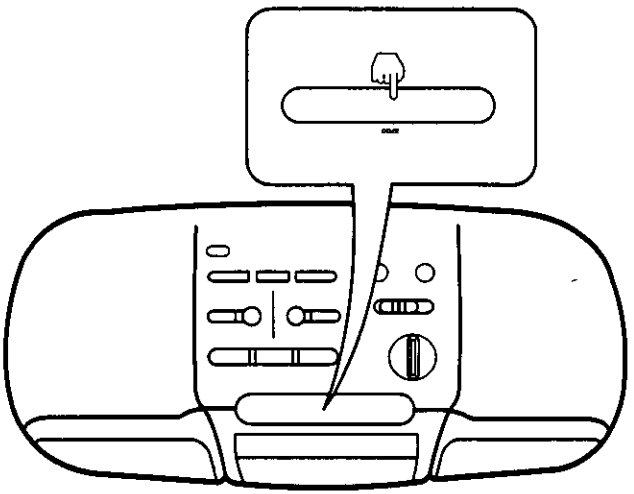
Combination of alarm 1 and alarm 2 permits the following convenience.



ALARM 1...RADIO
ALARM 2...OFF

Special Features

Doze operation

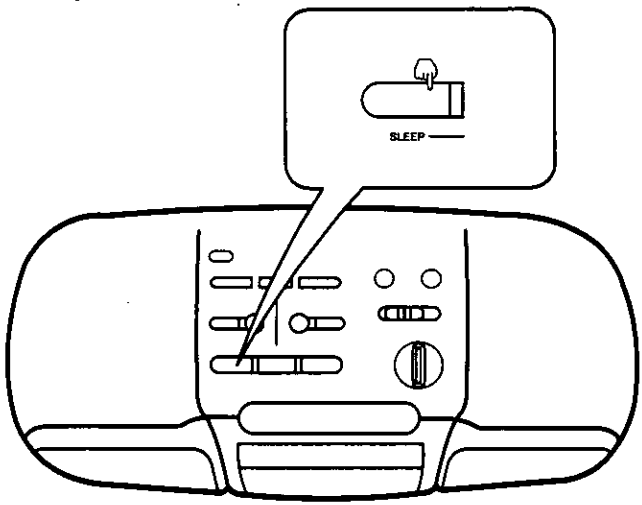


When the alarm activates, but you do not wish to wake up immediately, press the doze button.
The alarm will turn off for 7 minutes, then the alarm will operate again.

If you do not need doze time, and want to cancel the alarm, press the off/time set button.

While pressing the doze button, the clock display changes from "hours and minutes" to "minutes and seconds".

Radio sleep timer



You can set the clock radio to play up to about 59 minutes, then shut off automatically.

Press and hold the sleep button until the length of time for which you wish to listen to the radio is shown on the clock display.
Watch the display as it counts backward from 59 to 00.

At first, the clock display shows 59 minutes when you release the sleep button. Press this botton until the correct time returns on the clock display.

During radio-listening, you can confirm the number of minutes remaining by pressing the sleep button and looking at clock display.

To change the length of time for which you wish to listen to the radio, press the time set buttons while pressing the sleep button (See page 13).

Radio will be shut off automatically after the preset sleep time elapses.
To cancel the sleep timer and shut off the radio, press the off/time set button.

Combination of sleep timer and alarm function

You can set the clock radio to play for the desired time (up to 59 minutes) and shut off automatically, then activate the alarm automatically at the desired wake-up time.

1 **Set the desired wake-up time and press the desired alarm select button (alarm 1 or 2 select button).**

2 **Set the desired length of time for which you wish to listen to the radio.**
(See page 21.)

Specifications

Frequency Range: FM; 88–108 MHz
AM; 525–1710 kHz

Power Requirement: AC; 120V, 60Hz
Power consumption; 10 W
Battery; 9V (6F22/006P) for back-up

Speakers: 8 cm (3")×2

Jacks
Input; AUDIO IN
Output: Headphones (32Ω)

Dimensions (W×H×D): 311×108×143 mm (12¼"×4¼"×5⅝")

Weight: 1.4 kg (3 lb. 1 oz.) without battery

Note:
Specifications are subject to change without notice.
Weight and dimensions are approximate.

Product Service

Do not attempt to remove the cover(s) or repair the unit yourself. Refer servicing to qualified personnel only.

Product information

For product service, product information or assistance with product operation, refer to the servicenter directory.

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